



UNITED STATES DEPARTMENT OF COMMERCE
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SERIAL NUMBER 06-844-156	FILING DATE 08/27/84	FIRST NAMED APPLICANT NILSEN	ATTORNEY DOCKET NO. C
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EXAMINER	
BEHAW	
ART UNIT	PAPER NUMBER
212	35

DATE MAILED: 01/24/85

This is a communication from the examiner in charge of your application.

COMMISSIONER OF PATENTS AND TRADEMARKS

☒ This application has been examined ☐ Responsive to communication filed on _____ ☐ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), _____ days from the date of this letter.
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- | | |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input type="checkbox"/> Notice re Patent Drawing, PTO-948. |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449 | 4. <input type="checkbox"/> Notice of Informal Patent Application, Form PTO-152 |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474 | 6. <input type="checkbox"/> _____ |

Part II SUMMARY OF ACTION

1. ☒ Claims 118, 120-122, & 124-128 are pending in the application.
Of the above, claims _____ are withdrawn from consideration.
2. ☐ Claims _____ have been cancelled.
3. ☐ Claims _____ are allowed.
4. ☒ Claims 118, 120-122, & 124-128 are rejected.
5. ☐ Claims _____ are objected to.
6. ☐ Claims _____ are subject to restriction or election requirement.
7. ☐ This application has been filed with informal drawings which are acceptable for examination purposes until such time as allowable subject matter is indicated.
8. ☐ Allowable subject matter having been indicated, formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on _____. These drawings are ☐ acceptable;
☐ not acceptable (see explanation).
10. ☐ The ☐ proposed drawing correction and/or the ☐ proposed additional or substitute sheet(s) of drawings, filed on _____, has (have) been ☐ approved by the examiner. ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed _____, has been ☐ approved. ☐ disapproved (see explanation). However, the Patent and Trademark Office no longer makes drawing changes. It is now applicant's responsibility to ensure that the drawings are corrected. Corrections **MUST** be effected in accordance with the instructions set forth on the attached letter "INFORMATION ON HOW TO EFFECT DRAWING CHANGES", PTO-1474.
12. ☐ Acknowledgment is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received ☐ not been received
☐ been filed in parent application, serial no. _____; filed on _____.
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other

Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 120 as follows:

The continuing application must contain a specific reference to the parent application(s) in the specification.

This application filed under 37 CFR 1.60 lacks the necessary reference to the prior application. A statement reading "This is a continuation of application Serial No. 555,426, filed November 23, 1983" should be entered following the title of the invention or as the first sentence of the specification. Also, the present status of all parent applications should be included.

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The new title should reflect the crux of the invention, not just the general field of invention.

The references cited in the parent applications remain of record in this application.

Claims 118, 120-122 and 124-128 remain in the case.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless
(b) the invention was patented or described in
a printed publication in this or a foreign
country or in public use or on sale in this
country, more than one year prior to the date

of application for patent in the United States.

Claims 120 and 121 are rejected under 35 U.S.C. 102(b) as being anticipated by Rhoads.

Applicant is again reminded that claims are given their broadest reasonable interpretation. The "external load" is construed to mean the output circuit connected between modes A and D of figure 2A.

The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 118 and 122 are rejected under 35 U.S.C. 103 as being unpatentable over Rhoads in view of the British reference or ~~Walden~~ and Locklair.

The claims differ from figure 2A of Rhoads by calling for a series connected resonant LC circuit

having as frequency "not higher" than the fundamental inverter AC output frequency.

But, the British reference and Walden show it is old to place a series resonant LC circuit across the load terminals of an inverter. In the British reference the LC circuit is tuned to (not higher than) the fundamental frequency of the inverter. In Walden, the inverter may operate either above or below the resonant frequency of the LC circuit, operation on either side of resonance producing expected results.

Thus, it would have been obvious to use a series resonant circuit across ⁿnodes A and D of Rhoads and to couple a load such as a discharge lamp thereto. And to design the LC circuit coupled to a lamp, as in Walden, to have a natural resonant frequency that is "not higher" or lower than the inverter AC frequency for purpose of regulation is taught by Locklair, figure 2.

In summary, therefore, the broadly recited elements in the broadly recited combination of the claims would have been obvious over the collective teachings of Rhoads, the British reference, or Walden and Locklair.

Claims 120 and 121 are rejected under 35 U.S.C. 103 as being unpatentable over Rhoads in view of Walden.

Construing the recitation of an "external load" in the narrow sense intended by applicant, Walden shows it is old to use a resonant LC circuit across the output nodes of a bridge inverter and to connect a discharge lamp ~~across~~ the resonating capacitor. Moreover, whether the capacitor is connected to the right or left node of the circuit is patentably immaterial.

Claims 127 and 128 are rejected under 35 U.S.C. 102(b) as being anticipated by Locklair.

Taking claim 127 as exemplary (claim 128 is even broader), Locklair shows a self-oscillating inverter 11-39, output terminals 41, series resonant circuit 45,46 connected across terminals 41 by means of diode bridge 49, connect means 41 or 57,59 for connecting a load (across terminals 41 or resistor 55 across 57,59) "in circuit" with LC circuit 45,46, and feedback means T2, 35, 49, 63, 65, 67 for causing the inverter to self-oscillate at a frequency higher than the natural resonant frequency of the LC circuit (figure 2).

Claims 124-126 are rejected under 35 U.S.C. 102(b) as being anticipated by Locklair.

The recitations relating to a gas discharge lamp are given no patentable weight since the lamp is not part of the claimed combination. In other words, all that the claims generally require is an inverter with output terminals. In this sense the claims are anticipated by Locklair.

Any inquiry concerning this communication should be directed to William H. Beha at telephone number 703-557-5052.

Beha/kmd

703-557-5052

1-22-85

William H. Beha

LEAH R. COE,
EXAMINER
1-22-85